ANALOG-TO-DIGITAL CONVERTING MODULE

Abstract

A converting module for converting a first analog voltage into a digital output value includes a comparator for comparing the first analog voltage with a threshold voltage and generating a comparison result, the threshold voltage corresponding to a first group of digits containing at least one digit. A subtracting circuit generates a second analog voltage by subtracting the threshold voltage from the first analog voltage if the comparison result indicates that the first analog voltage is greater than or equal to the threshold voltage. Ananalog-to-digital converter converts the second analog voltage into a second group of digits and concatenates the first group of digits and the second group of digits to form the digital output value.